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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,723	08/20/2003	Travis T. Hailey JR.	2003-IP-009460 U1 USA	6112

7590

06/23/2005

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EXAMINER

GAY, JENNIFER HAWKINS

ART UNIT

PAPER NUMBER

3672

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,723

Applicant(s)

HAILEY, TRAVIS T.

Examiner

Jennifer H. Gay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/29/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the check valve as recited in claims 7, 15, 18, 30, 37, 38, 46, and 50 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 150. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and

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informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 32 and 59. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 7, 10, 15-23, 25, 26, 29-31, 34-40, and 44-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Malone (US 3,085,628).

Regarding claim 1: Malone discloses an inflatable well completion tool that includes an inflatable element 13 and a particulate filter 30' coupled to the element. The element is inflated by fluid filter by the filter. *The examiner notes that Malone does not specifically disclose using the tool with gravel slurry, however, the tool would be capable of filtering fluid from gravel slurry if this was the fluid used to inflate the element.*

Regarding claims 2, 19, 39: The element is capable of movement between a deflated and an inflated state where the element moves expands in a radial direction.

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Regarding claims 3, 45: The element includes a top end **11**, a bottom end **12**, an interior (Figures 2A and 2B), and a passageway **21, 22** allowing communication of the fluid between the top of the element and the interior of the element.

Regarding claims 7, 15, 18, 30, 37, 38, 46: The passageway includes a check valve **23**.

Regarding claim 10: Malone discloses an isolation packer that includes the following features:

- An inflatable element **13**.
- A passageway **21, 22** between the exterior and interior of the element.
- A particulate filter **30'** in the passageway. The element is inflated by fluid filter by the filter. *The examiner notes that Malone does not specifically disclose using the tool with gravel slurry, however, the tool would be capable of filtering fluid from gravel slurry if this was the fluid used to inflate the element.*

Regarding claim 16: The packer includes a tubular body **5** attached to the element.

Regarding claims 17, 29, 34: Malone discloses a wellbore isolation device that includes the following features:

- A tubular body member having a first **17** and second **19** segment where each segment includes an exterior and an longitudinal bore.
- A bladder **13** surrounding the second segment and having a wall, interior, upper end, and lower end (Figures 2A and 2B).
- A passageway **21, 22** located adjacent the first segment and extending through the wall of the element.
- A filter **30'** located in the passageway and coupled to the interior of the bladder. The element is inflated by fluid filter by the filter. *The examiner notes that Malone does not specifically disclose using the tool with gravel slurry, however, the tool would be capable of filtering fluid from gravel slurry if this was the fluid used to inflate the element.*

Regarding claims 20, 31: The bladder is indirectly attached to the tubular body member.

Regarding claim 22: The second segment includes an upper packer head **11** and a lower packer head **12** where the upper end of the bladder is connected to the upper packer head and the lower end of the bladder is connected to the lower packer head.

Regarding claims 23, 25: The passageway extends through the upper packer head and communicates between the exterior, i.e. the surface from where the fluid is pumped into the system, of the first segment and the interior of the bladder.

Regarding claims 26, 34, 35, 36: The tubular body member includes a third segment (Figure 2A) and the passageway enables communication between the exterior of the first and third segments and the interior of the bladder.

Regarding claim 40: The bladder forms a seal between the tubular body and the wellbore wall.

Regarding claims 44, 47: Malone discloses a method for completing a well using the above packer that involves filtering fluid to produce an inflation fluid and expanding the element with the fluid. *The examiner notes that Malone does not specifically disclose using the tool with gravel slurry, however, the tool would be capable of filtering fluid from gravel slurry if this was the fluid used to inflate the element.*

Regarding claim 48: The element seals an annulus of the wellbore thus isolating a first zone from a second.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4-6, 8, 9, 11-14, 24, 27, 28, 32, 33, 41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malone in view of Watson et al. (US 6,575,251).

Regarding claims 4, 5, 11, 12, 27, 28, 32, 33, 41, and 42 : Malone discloses all of the limitations of the above claims except for the passageway being a shunt tube or alternative channel.

Watson et al. discloses a tool similar to that of Malone. Watson et al. further teaches the use of a shunt tube to deliver the inflation fluid to the inflatable element.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the tool of Malone such that the passageway was a shunt tube as taught by Watson et al. in order to have allowed fluid communication but further restricted particulate communication (3:19-38).

Regarding claims 6 and 24: Malone discloses all of the limitations of the above claims except for the passageway extending through the upper and lower packer heads to allow communication between the exterior of the first and second segments or the lower packer head and the interior of the bladder.

Watson et al. further discloses that the passageway could extend through the upper and lower packer heads to allow communication between the exterior of the first and second segments or the lower packer head and the interior of the bladder (3:19-38).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified Malone such that the passageway extended through the upper and lower packer heads to allow communication between the exterior of the first and second segments or the lower packer head and the interior of the bladder as taught by Watson et al. in order to have allowed wellbore fluid outside the inflatable element to be used to inflate the bladder.

Regarding claims 8, 9, 13, and 14: Malone discloses all of the limitations of the above claims except for the tool including a first and second screen with the inflatable element being located there between.

Watson et al. further discloses using the tool in a sand completion that includes multiple screens with the inflatable element being located therebetween (8:55-9:2).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the tool of Malone to include the sand

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screens taught by Watson et al. in order to have been able to work on several formations at once while still isolating the zones from one another.

8. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malone in view of Szarka (US 4,627,488).

Malone discloses all of the limitations of the above claims except for the system including a cup packer.

Szarka discloses a isolation packer system similar to that of Malone. Szarka further teaches the use of cup packers 774, 776 with the system.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the system of Malone to include a cup packer as taught by Szarka in order to have preventing downward flow of fluid thus creating a pressure seal around the packer (13:49-51).

9. Claims 1-42 and 44-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson et al. in view of Malone or Wilson et al. (US 2004/0020644).

Regarding claims 1, 10, 17, 29, and 39: Watson et al. discloses a wellbore isolation device that includes the following features:

- A tubular body member having a first 17 and second 19 segment where each segment includes an exterior and an longitudinal bore.
- A bladder 13 surrounding the second segment and having a wall, interior, upper end, and lower end (Figures 2A and 2B).
- A passageway 21, 22 located adjacent the first segment and extending through the wall of the element.

Regarding claims 44 and 49: Watson et al. discloses a method of using the above device that involves the following steps:

- Providing a sand screen completion including the inflatable element.
- Gravel packing at least a portion of the well with a gravel slurry.
- Using the gravel slurry to inflate the element.

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Watson et al. discloses all of the limitations of the above claims except for a particulate filter located in the passageway for filtering fluid from the gravel slurry.

Malone and Wilson et al. disclose isolation packer systems. Malone and Wilson et al. further teach that it is known to filter the inflation fluid.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the system of Watson et al. to include a filter means as taught by Malone and Wilson et al. in order to have prevented damage to the inflatable element and to have prevented a build up of debris in the inflatable element thus hampering the deflation of the element.

Regarding claims 2-9, 11-16, 18-28, 30-38, 40-42, 45-48, and 50-52: Watson et al. discloses all of the features of the above claims (see 3:1-38, 7:30-35, 7:49-51, and 8:55-9:2)

10. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watson et al. in view of Malone or Wilson et al. as applied to claim 39 above, and further in view of Szarka.

Watson et al., Malone and Wilson et al. disclose all of the limitations of the above claims except for the system including a cup packer.

Szarka discloses a isolation packer system similar to that of Malone. Szarka further teaches the use of cup packers 774, 776 with the system.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the system of Watson et al. in view of Malone or Wilson et al. to include a cup packer as taught by Szarka in order to have preventing downward flow of fluid thus creating a pressure seal around the packer (13:49-51).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

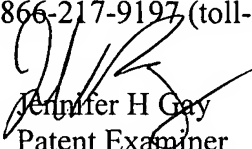
The remaining references made of record disclose various inflatable wellbore packers.

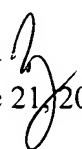
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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H. Gay whose telephone number is (571) 272-7029. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jennifer H Gay
Patent Examiner
Art Unit 3672

JHG 
June 21, 2005